

U.S. Department  
of Transportation

United States  
Coast Guard



Commander  
Eighth Coast Guard District  
Hale Boggs Federal Building

501 Magazine St.  
New Orleans, LA 70130-3336  
Staff Symbol: mvs  
Phone: (504) 589-3624

16711  
May 9, 1996

Mr. Steven M. Bradshaw, President  
OMR Transportation Company  
P.O. Box 1859  
477 Port Terminal Circle  
Vicksburg, MS 39181-1859

Dear Mr. Bradshaw:

Your request of April 2, 1996, as amended by your letter of April 26, 1996, to conduct stripping of cargo residue using portable equipment is approved. Barge stripping operations shall be conducted in accordance with your enclosed procedure entitled "11.190-Portable Stripping."

Based upon our review of your proposal, we have determined that enclosure (1) is acceptable as an alternative to the requirement for fixed piping in 46 CFR 156.120(g). This approval applies only to operations within the Eighth Coast Guard District.

Questions regarding this matter may be directed to Commander Tetreau, Chief Compliance Branch at (504) 589-3624.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. W. Calhoun".

J. W. CALHOUN  
Captain, U.S. Coast Guard  
Chief, Marine Safety Division  
By direction of the Commander  
Eighth Coast Guard District

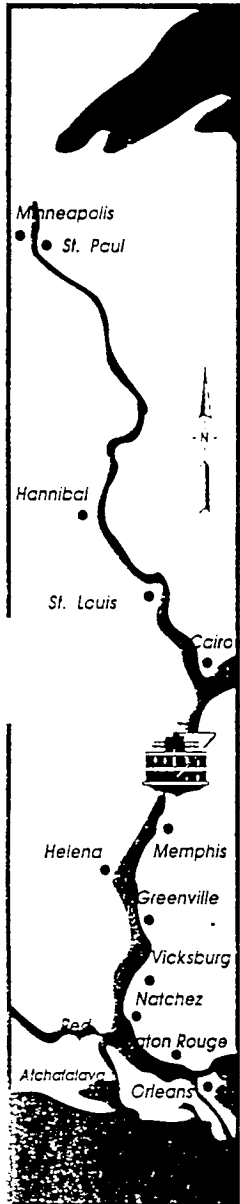
Encl: (1) "11.190 - Portable Stripping"

Copy: D8 and D2 MSOs, MSU and MSDs w/copy of OMR letters  
D2(m)

# OLE MAN RIVER

OMR Transportation Company

P.O. BOX 1859 477 PORT TERMINAL CIRCLE  
VICKSBURG, MISSISSIPPI 39181-1859  
601-638-5900 / FAX 601-638-6300



## VIA FEDERAL EXPRESS

April 2, 1996

Captain James W. Calhoun, USCG  
Commander (m)  
Eighth Coast Guard District  
Hale Boggs Federal Building, Room 1331  
501 Magazine Street  
New Orleans, LA 70130-3396

Re: Request for Approval to Conduct Portable Stripping of Cargo Residue from  
Inland Tank barges

Dear Captain Calhoun:

We very much appreciate the recent opportunity to meet with you and Commander Tetreau of your staff to discuss the procedures which OMR Transportation Company (OMR) proposes to use to safely remove cargo residue from its inland tank barges. The frank dialogue and your insights into related issues of Coast Guard concern were particularly helpful in refining OMR's procedures to ensure that the proposed stripping operations will be conducted with the utmost concern for safety and pollution prevention. We are submitting this letter as you have requested.

We request your approval for the removal of cargo residues from inland tank barges owned and/or operated by OMR Transportation Company employing the attached Portable Stripping Procedures. We provide the following summary of the presentation which we made to you in your offices in support of this request.

### The Situation

OMR Transportation Company operates eighty inland tank barges moving clean petroleum products on the inland waterways from Gulf Coast refineries to various locations in the Midwest. OMR's area of operations includes all Gulf Coast COTP zones, with the exception of Corpus Christi, and extends on the inland river system

northward into the St. Louis COTP zone and northeastward into the Louisville COTP zone. Eighteen of OMR's tank barges are double-skin; the remainder are single-skin.

In the past, because of the relatively few grades of refined petroleum products and the attendant high tolerance for contamination by prior cargo residues, OMR has been permitted by shippers and third party facility operators to load its barges without stripping the residue of the prior cargos from the cargo tanks. Changing market conditions in the refined products trade, coupled with increasingly stringent pre-loading cleanliness requirements of facility operators, now necessitate that OMR present its barges for loading in a "stripped liquid free" condition, with all prior cargo residue removed from the cargo tanks. With the advent of EPA requirements with respect to consumer use of such products as reformulated and oxygenated gasolines and high and low sulfur diesel fuels, shippers have been forced to tighten their pre-loading cargo tank cleanliness requirements. In addition, loading facilities are imposing increasingly stringent tank cleanliness requirements, without regard to the specific cargo to be loaded, as a protection against liability for later contamination claims by shippers or receivers of the cargo.

Design and construction characteristics of OMR's tank barges, particularly the internally framed single-skin barges, are such that, following discharge, several hundred gallons of cargo residue remain on board beyond the reach of the cargo transfer and fixed stripping systems. Accordingly, to meet these more stringent tank cleanliness requirements, OMR must use one of two methods to remove cargo residue. OMR must either take its barges to a shore-based tank cleaning facility for stripping or remove the cargo residue from the tanks while underway using appropriately trained towing vessel crew and a combination of fixed and portable stripping equipment. Because of the significant additional costs associated with the removal of a barge from service for cleaning at a shore-based facility, OMR has developed the attached Procedures.

#### The Solution

OMR is aware that the portable stripping operation which it proposes is subject to the requirements for transfer operations contained in 33 CFR Part 156 and 46 CFR Subpart 35.35. Those regulations include requirements for the transfer system to be attached to a fixed connection on the vessel's piping and not to be through an open end hose led through a hatch. However, 33 CFR 156.107 does permit the COTP to approve timely submitted alternative procedures to be used a vessel operator if the operator demonstrates that compliance with a requirement is economically or physically impractical and that the alternative provides an equivalent level of safety and pollution protection. As reflected in the discussion that follows, OMR believes that it can make those demonstrations. Because of the number of COTP zones in which OMR operates, we are directing this request to you.

April 2, 1996

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It is neither physically nor economically practical for OMR to comply with the regulatory requirement that the transfer system used to remove cargo residues from the tanks of its barges be attached to a fixed connection on the vessel. As indicated above, fixed stripping systems cannot adequately remove cargo residues, particularly in internally framed single-skin tank barges. Fixed stripping systems are currently installed on fifty-five of OMR's eighty tank barges, and such systems will be installed in the remainder, in conjunction with other repairs and inspections, by 1998. If OMR is restricted to the use of fixed stripping systems in removing cargo residues, it must then incur the costs associated with removing its barge from service and contracting with a shore-side tank cleaning facility to remove the residue. The cost of stripping a barge at a shore-based facility is approximately \$2,000 plus the costs associated with transporting the barge to and from the cleaning facility and removing it from service for the period necessary to complete the cleaning. As you are aware, the shore-based cleaning facility will, ironically, employ the same type of portable stripping operation that the attached procedures propose to employ.

The alternative reflected in the attached Procedures provides an equivalent levels of pollution protection and safety. As we discussed, the attached Procedures incorporate precautions set forth in the AWSC Safety Guidelines for Tank Vessel Cleaning Facilities and ISGOTT and have been modified to address the areas of your concern. With respect to pollution protection, existing pollution prevention regulations will be complied with by OMR in conducting portable stripping operations, and a specific requirement for compliance with the barge's oil transfer procedures is included in the attached. The attached Procedures emphasize attention to pollution prevention and protection, and the low volume, low pressure nature of the portable stripping operation creates significantly less risk of pollution than does a conventional cargo transfer. With respect to safety, the attached Procedures focus on the elimination of the possibility of the buildup of static electricity through the bonding of stripping equipment to the barge, the electrical continuity of stripping hoses, the use of non-sparking appliances, fittings, and connections, and the elimination of the free fall of liquid. The Procedures also focus on the elimination of other potential sources of ignition of cargo vapors through the use of air driven pumps and intrinsically safe lights, and the requirement to discontinue stripping operations and close the cargo hatch when in proximity to potential external ignition sources.

Captain James W. Calhoun, USCG

April 2, 1996

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We trust that the foregoing amply explains the situation which OMR faces and satisfactorily justifies the solution it proposes. If you have any questions, please feel free to contact me. We look forward to your prompt reply and, hopefully, approval of our request.

Very truly yours,

*Steven M. Bradshaw*

Steven M. Bradshaw

President

dt

Attachment

FILE SMB:CALHOUN

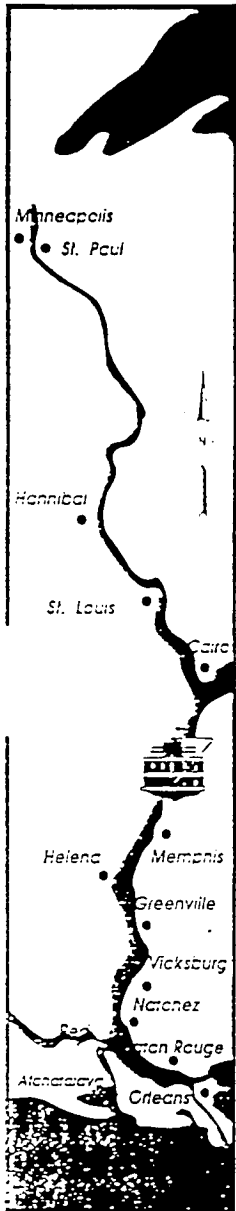
cc: Gerald A. Gallion

Russell G. Moore

David L. Shaw

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(K)  
APR 27 1996



VIA FEDERAL EXPRESS

April 26, 1996

Captain James W. Calhoun, USCG  
Commander (m)  
Eighth Coast Guard District  
Hale Boggs Federal Building, Room 1331  
501 Magazine Street  
New Orleans, LA 70130-3396

Re: Request for Approval to Conduct Portable Stripping of Cargo Residue from  
Inland Tank barges

Dear Captain Calhoun:

In response to Commander Tetreau's telefax of April 19, 1996 to our Rusty Moore, we have revised the Portable Stripping Procedures submitted with our letter to you of April 2, 1996. A copy of those revised Procedures is attached.

The following comments, keyed to the numbered paragraphs of Commander Tetreau's telefax, should assist you in locating and reviewing the revisions that have been made:

1. The last bullet of Section 5.1.7 has been revised, as suggested.
2. Section 5.1.11 has been added to address the issue of equipment allowed on deck, as suggested.
3. Sections 5.1.10 and 5.1.12 have been added to address the prohibition of other operations which could cause an unsafe condition, including a smoking prohibition, as suggested.

## 11.190 - Portable Stripping

### 1.0 PURPOSE:

To provide procedures for safe stripping of tank barges with portable equipment.

### 2.0 SCOPE:

Applies to the stripping of Subchapter "D" cargoes from barges when fixed stripping or piping system does not adequately remove all cargo from cargo tanks.

### 3.0 RESPONSIBILITY:

3.1 The Master ensures that each crewmember to be designated as Tankerman - Person in Charge of portable stripping operations is in possession of:

3.1.1 A valid tankerman's license or endorsement appropriate for the cargo to be stripped.

3.1.2 Evidence of completion of company portable stripping training course

3.2 The Pilot on watch ensures that:

3.2.1 These procedures are followed.

3.2.2 When towing vessel manning level permits, an additional crewmember is designated and available to assist the Tankerman - Person in Charge as necessary for the safe completion of portable stripping operations.

3.3 The Tankerman - Person in Charge:

3.3.1 Ensures that a Letter of Alternative Compliance or other Coast Guard authorization to conduct portable stripping operations employing these procedures is on board the barge.

3.3.2 Ensures that portable stripping operations are conducted only when there is sufficient light to clearly observe and monitor the integrity of all stripping equipment, fittings, and connections.

3.3.3 Conducts the stripping operation in compliance with these procedures, the barge's oil transfer procedures, and applicable regulations.

- 3.3.4 Ensures that no one enters any cargo tank or other confined space of the barge at any time during preparation, conducting, or securing of the stripping operation.

#### 4.0 CHANGE:

Original

#### 5.0 PROCEDURES:

5.1 Prior to conducting a portable stripping operation, ensure that:

- 5.1.1 The cargo residue to be stripped is identified by use of the Cargo Identification Card or MSDS on board.
- 5.1.2 All personnel involved in the stripping operation are advised of the cargo characteristics and hazards.
- 5.1.3 All personnel involved in the stripping operation are knowledgeable in the proper operating of portable stripping systems.
- 5.1.4 All personnel involved in the stripping operation have been provided with the appropriate safety and personal protective equipment for the cargo to be stripped.
- 5.1.5 A thorough review of cargo and stripping piping on board the barge is conducted and the discharge tank(s) of adequate capacity and connection(s) are identified.
- 5.1.6 All stripping equipment necessary to accommodate the configuration of the barge (see appropriate diagram in Attachment A) is placed aboard the barge.
- 5.1.7 Only equipment specified below is used in the portable stripping operation:
  - ✍ Air operated diaphragm stripping pump with bonding cable.
  - ✍ Wire reinforced suction and discharge hoses approved for oil service with electrical continuity, meeting the requirements of 33 CFR 155.800.
  - ✍ Aluminum stripping wands fitted with brass or stainless steel tips and bonding cables.





- 5.3.2 Connect bonding cable on stripping wand securely to an unpainted steel location on the barge.
  - 5.3.2.1 No equipment may be inserted into a cargo tank unless it is bonded to the barge.
  - 5.3.2.2 Ensure that bonding cable is of sufficient length to allow the wand to be lowered into the cargo tank without putting a strain on the securing clamp.
- 5.4 Connect the hoses in the following sequence:
  - 5.4.1 Connect the necessary amount of discharge hose between the discharge connection on the bonded stripping pump and the fixed piping connection to the discharge tank.
  - 5.4.2 Connect the necessary amount of suction hose between the suction connection on the bonded stripping pump and the bonded stripping wand.
  - 5.4.3 Check valve on stripping pump to ensure it is in the off position, and connect the air supply hose to the air supply fitting on the bonded stripping pump.
- 5.5 Inspect the entire system again to ensure the proper connection of hoses to the stripping pump, stripping wand, and discharge tank and the proper connection of bonding cables to the stripping pump, stripping wand, and barge.
- 5.6 Conduct the stripping operation.
  - 5.6.1 Open the hatch of the cargo tank to be stripped and insert the stripping wand.
    - 5.6.1.1 Open hatches must be monitored throughout the stripping operation.
    - 5.6.1.2 The tank must be stripped as quickly as possible to minimize dilution of the tank atmosphere with oxygen and limit the time that the tank is open to the environment.
    - 5.6.1.3 Ensure that the stripping wand reaches the bottom of the cargo tank.

5.6.1.4 Extreme caution must be exercised to keep all sources of ignition, including static electricity, away from the cargo tank and vapor trails.

5.6.1.5 The stripping operation must be stopped, the bonded stripping wand must be removed from the cargo tank, and the hatch must be closed whenever:

- ✧ The barge is in proximity to or passing under a bridge.
- ✧ The barge is in a lock.
- ✧ The barge is in proximity to another vessel in navigation.
- ✧ The barge is in proximity to any potential source of ignition.
- ✧ An electrical storm is present or is anticipated in the vicinity of the barge.

5.6.2 Make frequent checks of all equipment used during the stripping operation.

5.6.2.1 Check all hoses, fittings, and bonding cables for secure connection.

5.6.2.2 If any leak is detected, immediately stop the stripping operation until the problem is corrected and any spilled material has been contained, removed, and reported as required.

5.6.3 Do not leave the barge while stripping operations are in progress.

5.6.4 When stripping of a tank is completed, allow the stripping pump to operate for an additional few minutes to ensure all cargo residue is discharged from the discharge hose into the discharge tank.

5.6.5 Ensure that the bonding of the stripping wand to the barge is maintained until the stripping wand is removed from the cargo tank.

5.6.6 Ensure that portable spill containment is placed under each hose connection when disconnecting or moving the stripping equipment.

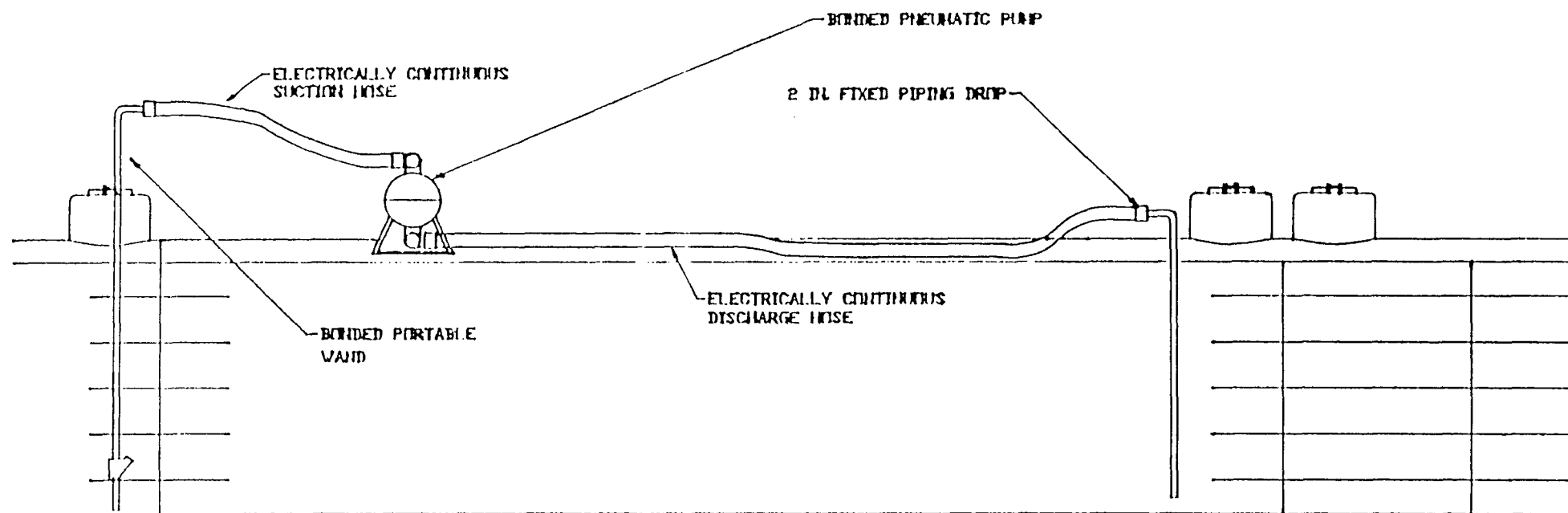
5.6.7 Repeat steps 5.3 through 5.6 when changing tanks to be stripped.

5.7 Secure stripping equipment.

- 5.7.1 Do not leave the barge until all equipment has been removed from the tanks and all hatches are closed.

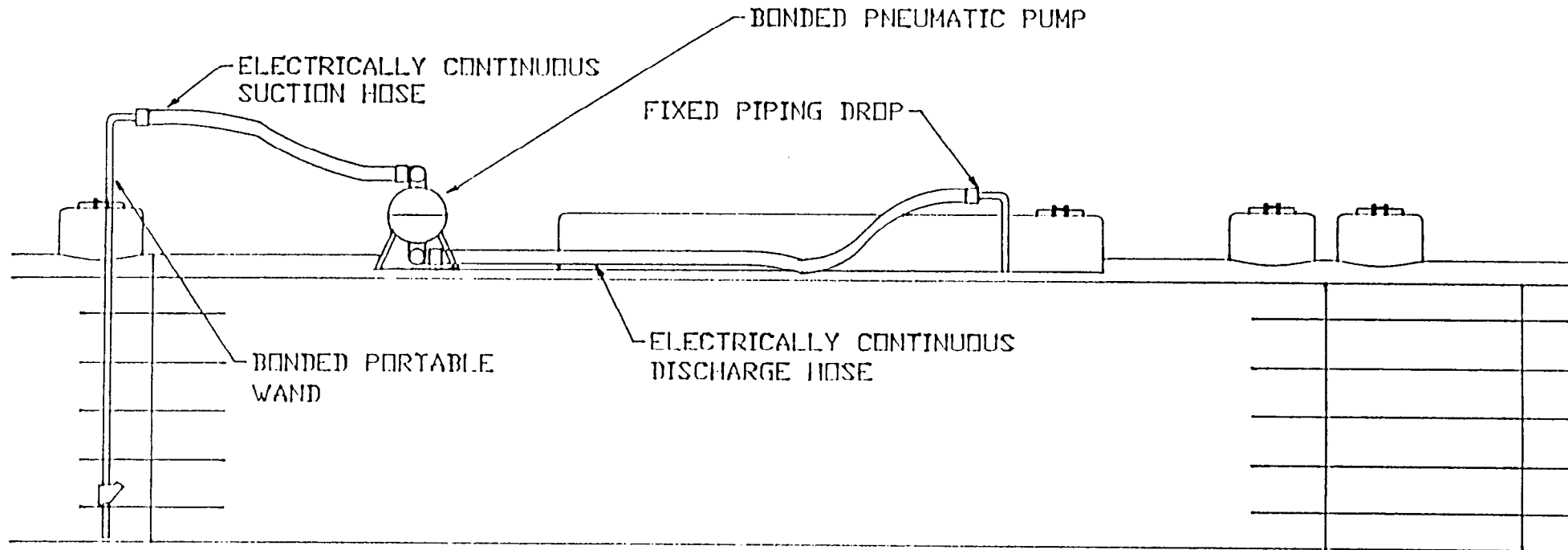
EXHIBIT A

TANK TO TANK TRANSFER USING FIXED  
PIPING DROPS AT THE RECEIVING TANK



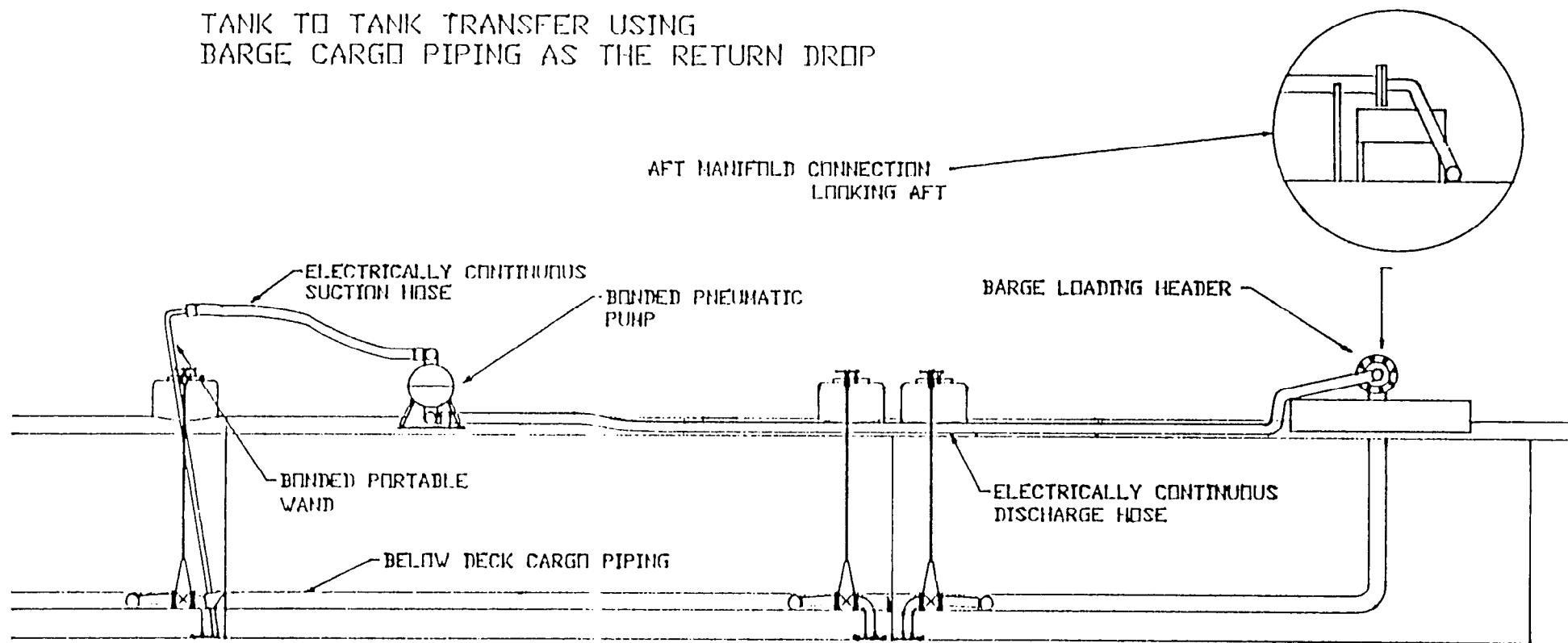
SUCTION AND DISCHARGE HOSES ARE DESIGNED FOR OIL SERVICE WITH ELECTRICAL CONTINUITY AND MEET THE REQUIREMENTS OF 33 CFR 155.800  
PUMP AND STRIPPING WAND MUST BE BONDED TO BARGE HULL PRIOR TO USE  
STRIPPING WANDS AND HOSE FITTINGS ARE TO BE CONSTRUCTED OF NON SPARKING MATERIALS (ALUMINUM, BRASS OR STAINLESS STEEL)

# CARGO TANK TO DECK TANK TRANSFER USING FIXED PIPING DROP AT THE DECK TANK



SUCTION AND DISCHARGE HOSES ARE DESIGNED FOR OIL SERVICE WITH ELECTRICAL CONTINUITY AND MEET THE REQUIREMENTS OF 33 CFR 155.800  
PUMP AND STRIPPING WAND MUST BE BONDED TO BARGE HULL PRIOR TO USE  
STRIPPING WANDS AND HOSE FITTINGS ARE TO BE CONSTRUCTED OF NON SPARKING MATERIALS (ALUMINUM, BRASS OR STAINLESS STEEL)

# TANK TO TANK TRANSFER USING BARGE CARGO PIPING AS THE RETURN DROP



SUCTION AND DISCHARGE HOSES ARE DESIGNED FOR OIL SERVICE WITH ELECTRICAL CONTINUITY AND MEET THE REQUIREMENTS OF 33 CFR 155.800  
PUMP AND STRIPPING WAND MUST BE BONDED TO BARGE HULL PRIOR TO USE  
STRIPPING WANDS AND HOSE FITTINGS ARE TO BE CONSTRUCTED OF NON SPARKING MATERIALS (ALUMINUM, BRASS OR STAINLESS STEEL)

FAX

Subj: OMI PROPOSAL FOR TANK  
CLEANING WHILE UNDERWAY

Date: APRIL 19, 1996

From: CDR Guy A. Tetreau

To: Mr. Rusty Moore

As discussed in our phone conversation on this date, I have completed review of the subject package and would like to see the following modifications prior to approval:

1. Expand section 5.1.7 to state that only USCG or MSHA approved flashlights for Class I, Group D atmospheres shall be used.
2. Add verbiage similar to the last paragraph in section 1.1.2 (a) of the Safety Guidelines for Tank Vessel Cleaning Facilities (SGTVCF) regarding equipment allowed on deck during cleaning operations.
3. Add verbiage similar to that in the 1st paragraph of section 1.1.2 (c) of SGTVCF regarding other operations allowed on deck (include smoking prohibition).
4. Add the requirement to shut down operations in case of impending electrical storms (see 1.1.2 (n) of SGTVCF).
5. Be specific on the pass/fail criteria for the hose continuity test (see sect 8.1.4 of ISGOTT).
6. Expand your procedure (probably around 5.6.1.1) to establish the philosophy that tanks will be cleaned as quickly as possible to minimize dilution of the tank atmosphere with oxygen and to limit the amount of time the tank is open to the environment.
7. Expand your procedures (probably around sec. 5.6.2) to require frequent checks of all equipment used during the cleaning operation and cessation of operations in the case of leaks until the problem is corrected (see 1.2.2 (c) of SGTVCF).
8. Include a general prohibition against tank entry (see 1.1.5 of SGTVCF).
9. Your plan (5.1.7) states that an aluminum wand with stainless steel tip will be used. Section 1.2.02 of SGTVCF states that aluminum wands with brass tips are acceptable. Please clarify.

Upon receipt of your updated manual, I will complete my approval actions.

Thank you for your quick attention to this matter.

  
Guy A. Tetreau